

THERAPEUTICS

UNDER THE CHARGE OF

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Radium Therapy in Cancer.—EWING (*Jour. Am. Med. Assn.*, 1917, lxxviii, 1238) says that the progress of radium therapy in cancer has been so rapid, many of its results have been so paradoxical, and the time test of their permanency so important, that it is difficult to conceive just what position radium therapy will eventually occupy. The fact that radium will bring about the destruction of tumor cells without seriously injuring the contiguous normal tissue is of great biological interest, probably the most important single contribution of modern cancer research. Ewing says that radium is only a locally acting agent, and it is difficult to see how it can be made to exert a universal action over the body as to affect the constitutional element in cancer. It is not, therefore, the ideal cancer cure which some have conceived and many demand before they will pay attention to new treatments for cancer. In the author's opinion the future position of radium is not to be merely as a palliative in advanced or recurrent cancer, in which capacity it is of great value, or as an adjuvant to surgery with which it may be used to advantage, but as an agent for dealing with certain forms of early and strictly operable cancer. At present it will be well to limit the use of radium to cases in which there is some contraindication to operation. In regions like the tongue and buccal or pharyngeal mucosa, where operation is mutilating and highly unsatisfactory, radium certainly deserves a trial. Radium has been successfully used in the field of uterine cancer and there is more and more a tendency to extend its use to the strictly operable forms of the disease. Ewing does warn against the possible abuse of the use of radium in cases where early operation may also be advised. On the other hand, there is great hesitation and delay practised by many physicians in dealing with early lesions of doubtful nature. It is just in this field of precancerous lesions, hypertrophies, atypical inflammatory overgrowths, warts and polyps of mucocutaneous functions, numerous leukoplakias, cervical erosions, nevi, and many accessible benign tumors, that radium is both efficient and comparatively free from danger. Ewing reviews briefly the more important literature dealing with the use of radium in cancer and discusses the effect of radium on the various types of cancer from the stand-point of pathology.

The Serum Treatment of Seventy-six Cases of Epidemic Poliomyelitis.—AMOSS and CHESNEY (*Jour. Exper. Med.*, 1917, xxv, 581) report 26 cases of poliomyelitis treated with serum obtained from persons recently recovered from poliomyelitis, at which time it is supposed to contain immune substances in greatest concentration. The treatment was begun with definite plans for administering the

serum early in the disease and in large amounts. The time limit between onset and treatment was set at forty-eight hours, and of the 26 cases treated, 18 were treated within this time. Apparently the best results were obtained in cases treated within thirty hours after onset, though beneficial results were obtained in one instance as late as ninety-six hours after onset. Of 12 cases which showed paralysis at the time serum was first given, one patient died ten hours after the serum was given, 2 patients suffered some degree of extension of the paralysis, while the remaining 9 showed no extension of the paralysis. Of 14 cases in which no paralysis was detected at the time serum was administered, 2 patients developed respiratory paralysis and died; and 2 others developed some degree of weakness or partial paralysis of certain muscle groups. The 10 remaining cases (72 per cent.) never showed any detectable weakness. In the ten instances in which no paralysis occurred, the fever, sometimes high, tended to fall rapidly to normal, the average time of the fall being 25.7 hours. The authors believe that this moderate number of cases is sufficient to demonstrate the harmlessness of the serum when introduced intraspinally. The gravity method of injection was always employed. Each sample of serum was tested bacteriologically and in every instance a Wassermann test was made to exclude syphilitic taint. Particular care was taken to obtain serum free from corpuscles or hemoglobin. With attention to these details reactions to the serum treatment may be reduced to the minimum. The question of multiple and repeated injections of the serum has not yet been worked out. In the cases here reported and especially in the group in which no paralysis existed at the time of the first injection, the pathological process either did not progress at all, or where there was extension, as in two cases the upper segment of the spinal cord became rapidly involved, and was followed by respiratory paralysis and death. Probably in cases in which some degree of muscular weakness develops soon after the injection of serum, reinjection twelve to twenty-four hours later may be advantageous.

Intraspinal Treatment of Neurosyphilis with Standardized Salvarsanized Serum.—STONER (*Jour. Am. Med. Assn.*, 1917, lxxviii, 610) concludes from his experience with the treatment of 72 cases of various forms of neurosyphilis that Ogilvie's modification of the Swift-Ellis method gives the most satisfactory results yet obtained, and with the minimum discomfort to the patient. By this method at least half of the patients have no discomfort at all, and most of the remainder have only trivial symptoms of transitory character. He says that with experience there is no greater risk in giving intraspinal treatment than intravenous. In none of the 72 cases was there evidence of untoward effects following treatments. The average number of spinal injections to a patient was four and the maximum, twelve. The spinal fluid leukocyte count was made normal in 40 per cent., the spinal Wassermann negative in 12 per cent., the globulin negative in 20 per cent., and the spinal fluid made entirely normal in 10 per cent. The spinal fluid improved in nearly 37 per cent., but remained unimproved in 13 per cent. Two-thirds of the patients were improved in one or more symptoms. It was found that clinical improvement did not necessarily parallel laboratory improvement. Paresis did not